

REMARKS

In response to the present action, Applicants have amended Claims 29-31, 33 and 34 and cancelled Claim 35 without prejudice. Accordingly, Claims 29-34 are pending. None of these amendments presents new matter. Favorable reconsideration and allowance are respectfully requested.

Claim 29 has been amended to more particularly recite that the antibodies are specific for M-CSF, GM-CSF or both. Claims 29 and 30 as amended removes "of the monocyte/macrophage lineage;" this phrase has been moved to dependent Claim 31 and the dependency of Claim 33 revised in view thereof. Claim 34 has been amended to recite administering an antibody which antagonizes the effects of u-PA.

Miscellaneous

The Examiner has indicated the restriction requirement has been made final and in doing so indicated that Applicants stated that searching the claims of Group III would provide useful information for the claims of Group VI and IX. With all respect, Applicants wish to clarify the record in this regard, having said that "rejoining these groups for examination does not place an undue search burden on the Examiner –and in fact simplifies the searches since the subject matter of Group III is common to all three groups."

Applicants have amended the title as requested to more clearly reflect the claimed subject matter.

Applicants also alert the Examiner to the Information Disclosure Statement (IDS) submitted May 12, 2004, as the IDS and the present Office Action appear to have crossed in the mail.

The 112 Second Paragraph Rejection

Claim 35 has been rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite. Applicants have cancelled this claim, thereby rendering this rejection moot.

The Two 112 First Paragraph Rejections

Claims 29-35 have been rejected under 35 U.S.C. § 112, first paragraph, for alleged lack of enablement. Additionally, Claims 29-35 have been rejected under 35 U.S.C. § 112, first paragraph, for alleged lack of written description. In making these two rejections, the Examiner acknowledged, in the first instance, that at least the subject matter of Claims 29-33 was enabled (p. 3, Section 7, second full paragraph) and, in the second instance, that the specification evidenced Applicants' possession of at least the subject matter of Claims 29-33 (p. 6, Section 8, second full paragraph). Accordingly, Applicants respectfully want the record to reflect that both rejections should have been applied (or presently do apply) only with respect to the subject matter of Claims 34 and 35.

Similarly, in making the above rejections, the Examiner indicated (1) that at least the subject matter of Claim 34 directed to administering an antibody which antagonizes the effects of u-PA was enabled and (2) that at least this same subject matter of Claim 34 satisfied the written description requirement. However, insofar that Claim 34 was originally drawn to any agent which antagonizes the effects of u-PA, and for Claim 35, which recited the further administration of any other agent that antagonizes the effects of any other inflammatory mediator, the Examiner indicated that Claims 34 and 35 allegedly lacked enablement and written description.

While not agreeing with the reasoning for these rejections, to advance prosecution, Applicants have cancelled Claim 35 and amended Claim 34 to be commensurate with the breadth of enablement and written description requirements that the Examiner has admitted are satisfied. Applicants reserve the right to prosecute the cancelled subject matter in a divisional application.

Accordingly, in view of the amendments to the claims, Applicants deem both rejections under 35 U.S.C. § 112, first paragraph, as overcome and respectfully request withdrawal thereof.

The 102(a) rejections

Claims 29-33 have been rejected under 35 U.S.C. 102(a) as allegedly anticipated by WO00/09561 to Lopez *et al.*, published February 24, 2000 (the WO '561 reference) or JP2000-198799 to Nakada, published July 18, 2000 (the JP '799 reference).

The subject matter of the present invention (as set forth in amended Claim 29) is directed to a method for ameliorating the effects of inflammation which comprises administering one or more antibodies specific for M-CSF, specific for GM-CSF or a combination thereof for a time and in an amount to inhibit or otherwise antagonize the effects of M-CSF or GM-CSF on cells.

In this regard, the Examiner stated that the WO '561 reference provides a method for ameliorating the effects of inflammation by administering an antibody against GM-CSF. The antibodies disclosed in the WO '561 reference bind to the common beta chain (β_c) of IL-3, GM-CSF and IL-5, and thus represent an antibody reactive with multiple cytokines. In contrast, the present invention uses antibodies that react specifically with a single cytokine (either M-CSF or GM-CSF). Consequently, the antibodies in the WO '561 reference are not specific for GM-CSF, exert activity differently from those of the present invention and are therefore distinct from those set forth in Claim 29 as amended.

Moreover, nowhere does the WO '561 reference teach, disclose or suggest use of antibodies having the presently claimed specificity as useful to ameliorate inflammatory conditions. Hence, that reference fails to motivate those of skill in the art to make the presently claimed invention. Accordingly, the WO '561 reference fails to teach every element of the presently claimed subject matter and therefore does not anticipate the subject matter of Claims 29-33.

Further, the JP '799 reference is not prior art to the present application because the present application is entitled to benefit under 35 U.S.C. § 119(e) of provisional patent application U.S. Ser. No. 60/202,392, filed May 8, 2000.¹ Moreover, the provisional application, which contains the same examples, drawings and nearly an identical disclosure as the present application, satisfies the requirements of 35 U.S.C. § 112, first paragraph, with respect to the presently claimed subject matter. Consequently, because the JP '799 reference publication date (July 18, 2000) is after the filing date of the provisional application (May 8, 2000), the JP '799 does not represent valid prior art under 35 U.S.C. § 102(a).

Accordingly, Applicants respectfully request withdrawal of these two rejections under 35 U.S.C. § 102(a).

The 102(e) rejection

Claims 29-33 have been rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent No. 5,837,460 to Von Feldt *et al.* (the '460 patent).

The '460 patent describes the identification, production and use of synthetic peptides which mimic GM-CSF. While antibodies against GM-CSF were used to identify the desired

¹ Because a copy of the provisional application should be readily available to the Examiner, Applicants have not enclosed a copy thereof. However, Applicants are happy to do so upon request.

peptides, nowhere does the '460 patent teach, disclose or suggest the use of any antibodies specific for GM-CSF to treat or ameliorate inflammation. In fact, the '460 patent teaches that "peptides which mimic proteins bind to the same molecules as the proteins do" and can thereby act as agonists or antagonists of that protein (Col. 4, lines 26-33). Hence, according to the '460 patent, its peptide mimics bind to proteins such as the GM-CSF receptor, not GM-CSF. This contrasts to antibodies specific for GM-CSF, which bind to GM-CSF and therefore exert their action by a different mechanism. While column 9 of the '460 patent indicates that such GM-CSF peptide mimics, in their antagonist form, may be useful as anti-inflammatory agents, this teaching is insufficient to infer that antibodies specific for GM-CSF, which are much larger molecules and exert activity via a different mechanism, are useful, no less enabled, for ameliorating inflammation. No where is there any disclosure, teaching or suggestion in the '460 patent that administration of antibodies specific for GM-CSF, M-CSF or both are useful to ameliorate inflammation. Accordingly, the '460 patent does not anticipate the invention as presently claimed and this rejection under 35 U.S.C. § 102(e) should be withdrawn.

The 103(a) rejection

Claims 34 and 35 have been rejected under 35 U.S.C. § 103(a) as allegedly rendered obvious by the WO '561 reference, the JP '799 reference or the '460 patent, each in view of U.S. Patent No 5,444,153 to Goss *et al.* (the '153 patent) or U.S. Patent No. 5,662,609 to Slepian *et al.* (the '609 patent).

Claim 35 has been cancelled, thereby rendering moot this aspect of the rejection.

The primary references (the WO '561 and JP '799 references and the '460 patent) have been discussed above and distinguished or removed as references. The secondary references (the

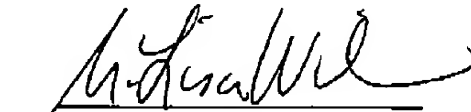
'153 and '609 patents) relate to methods of treating inflammatory diseases in a patient by administering specific inhibitors of u-PA and therefore do not ameliorate the deficiencies of the primary references. Accordingly, the secondary references do not render obvious the presently claimed invention. Applicants deem this rejection traversed and respectfully request withdrawal thereof.

Conclusion

In view of the foregoing amendments and remarks, Applicants firmly believe that the examined subject matter is in condition for allowance, which action is earnestly solicited. If any issues remain outstanding after consideration of this Amendment, the Examiner is invited to contact the undersigned to expedite prosecution of this case.

Respectfully submitted,

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M. Lisa Wilson
Reg. No. 34,045

Duane Morris LLP
380 Lexington Ave.
New York, NY 10168
Tel.: (212) 692-1000
Fax: (212) 692-1020
Direct Line: (212) 691-1092
Email: lwilson@duanemorris.com